

You can even set up a formula to calculate the difference between the two totals and report an error in case a non-zero result is returned (see Figure 217).

Error Checking Demonstration				
Sum columns A, B and C				
A	B	C		Row Sums
0	0.64	0.02		0.66
0.43	0.23	0.75		1.41
0.91	0.57	0.59		2.07
0.07	0.07	0.45		0.59
0.37	0.33	0.04		0.74
0.34	0.06	0.98		1.38
0.95	0.34	0.65		1.94
0.93	0.08	0.63		1.64
0.61	0.82	0.17		1.6
Column Sums		=SUM(B22:B29)	4.26	
TOTAL:			11.37	12.03
				ERROR!!!

Figure 217: Error checking of formulas

Creating formulas

You can enter formulas in two ways. One method is to use the Function Wizard or the equivalent facilities in the Functions deck of the Sidebar. The second method is to type directly into the cell or into the Input line. A formula must begin with an = symbol. When typing directly, you normally need to start a formula with =. However, if your formula begins with a + or – (for example -2*A1), then Calc automatically adds the = symbol. An = is not added if you simply enter a positive or negative number (such as -2 or +3). Starting with anything else causes your intended formula to be treated as if it were text.

Operators in formulas

Each cell in the sheet can be used as a data holder or a place for data calculations. To enter data, simply type in the cell and move to the next cell or press *Enter*. With formulas, the equals sign indicates that the cell will be used for a calculation. An example of a mathematical calculation like 15 + 46 is shown in Figure 218.

While the calculation on the left used only one cell, the real power is shown on the right where the data is placed in cells and the calculation is performed using references to the cells. In this case, cells B3 and B4 were the data holders, with B5 the cell where the calculation was performed. Notice that the formula was shown as =B3+B4. The plus sign indicates that the contents of cells B3 and B4 are to be added together and then have the result in the cell holding the formula. All formulas build upon this concept. Other ways of using formulas are shown in Table 5.

These cell references allow formulas to use data from anywhere in the sheet being worked on, or from any other sheet in the document that is opened. If the data needed was in different sheets, they would be referenced by referring to the name of the sheet, for example =\$Sheet2.B12+\$Sheet3.A11.

Note

To enter the = symbol for a purpose other than creating a formula as described in this chapter, type an apostrophe or single quotation mark before the =. For example, in the entry '= means different things to different people', Calc treats everything after the single quotation mark—including the = sign—as text.